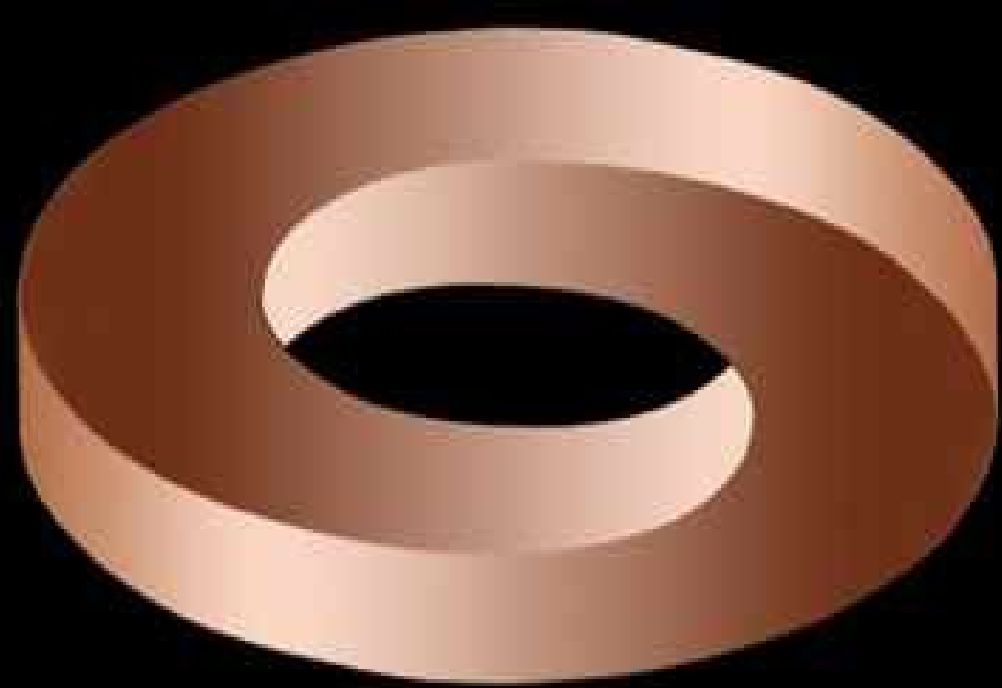


# Machine status



Machine Experiments  
January 26, 2005





## Status – 2 weeks

Total from January 11 (nbarn-1)

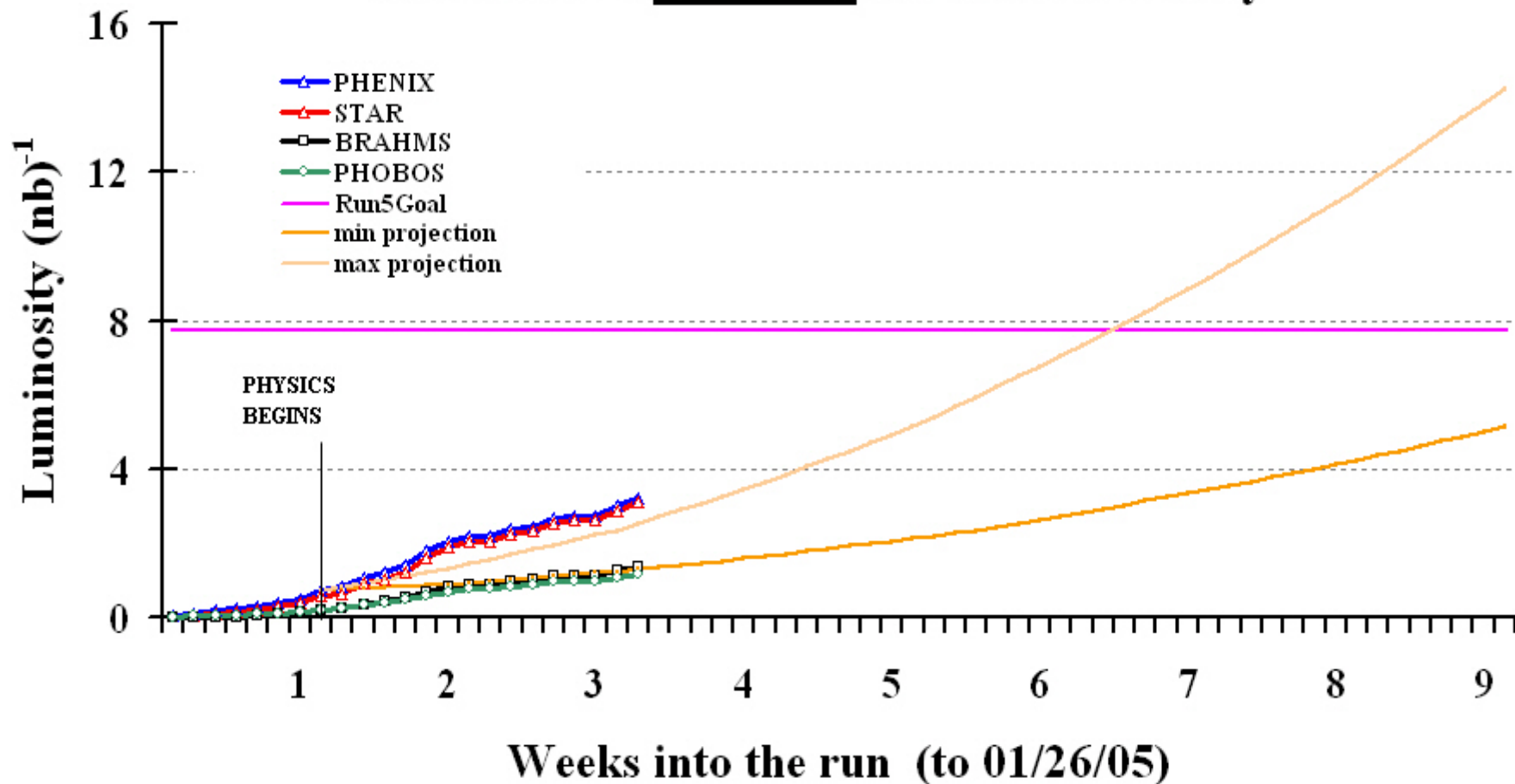
Phenix: 2.48

STAR: 2.54

Brahms: 1.10

Phobos: 0.96

### RHIC Run 5 Delivered Cu-Cu Luminosity





## Week 2 challenges

Access 18+ hours → 1.5-2 days to recover beam operations

Snow storm → beam operations off from owl of Sunday till Monday 7:30pm

assessment of response → plan for future

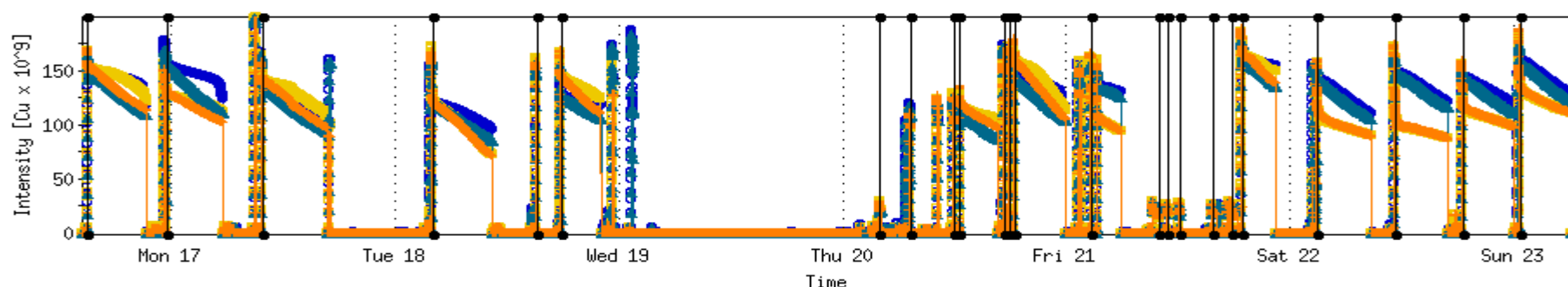
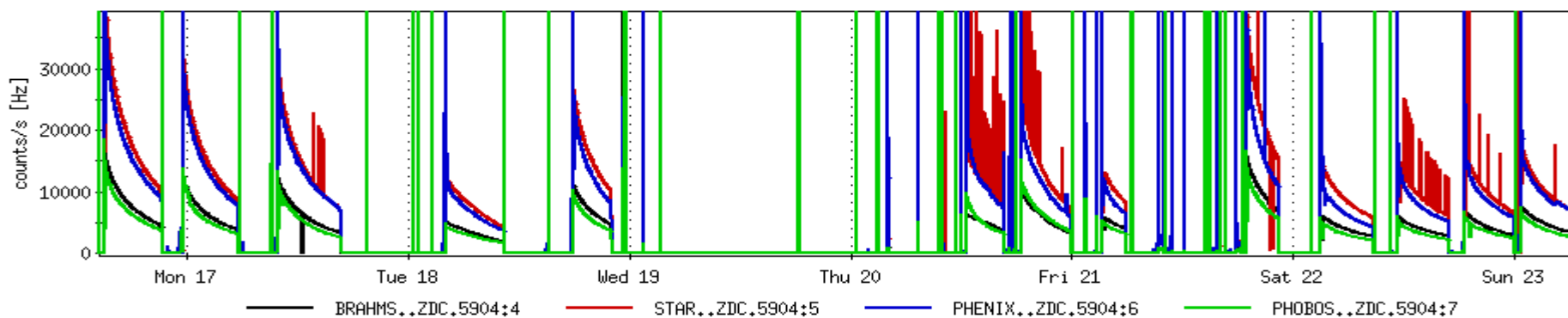
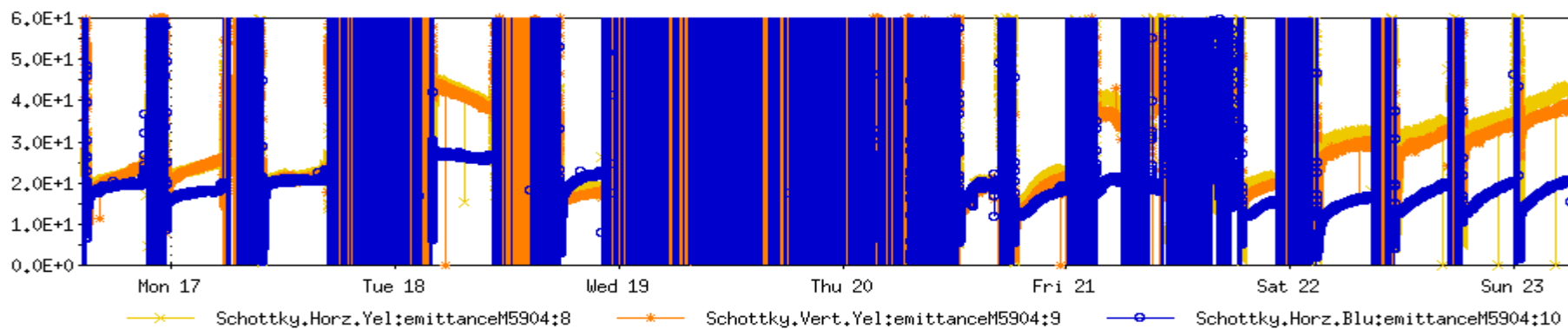
Instability  $\sim 0.5$ sec after transition

→ emittance blow-up, transmission, low rates, background

- ❑ Move chromaticity zero crossing early at transition (raise chrom just after transition)
- ❑ Work on collimation, background

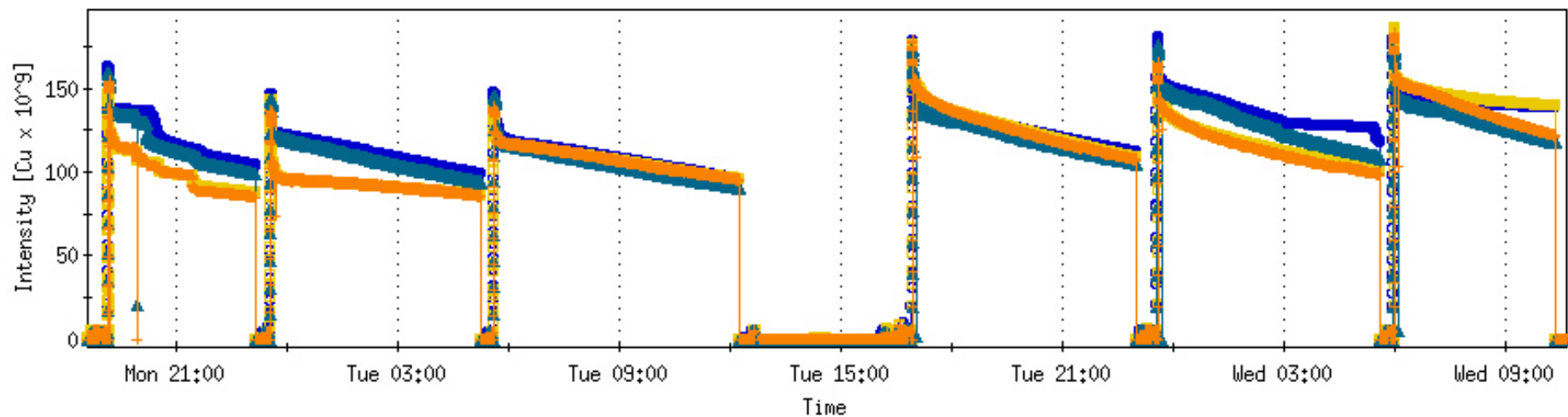
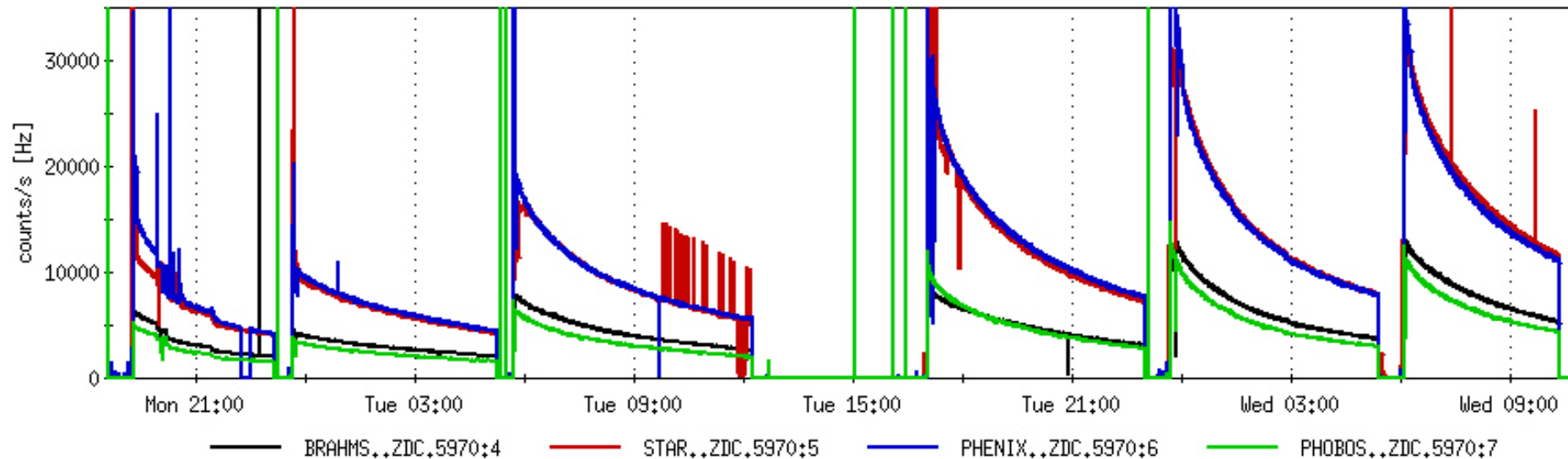


# Intensity/collisions – Week 2





# Stores after snow storm

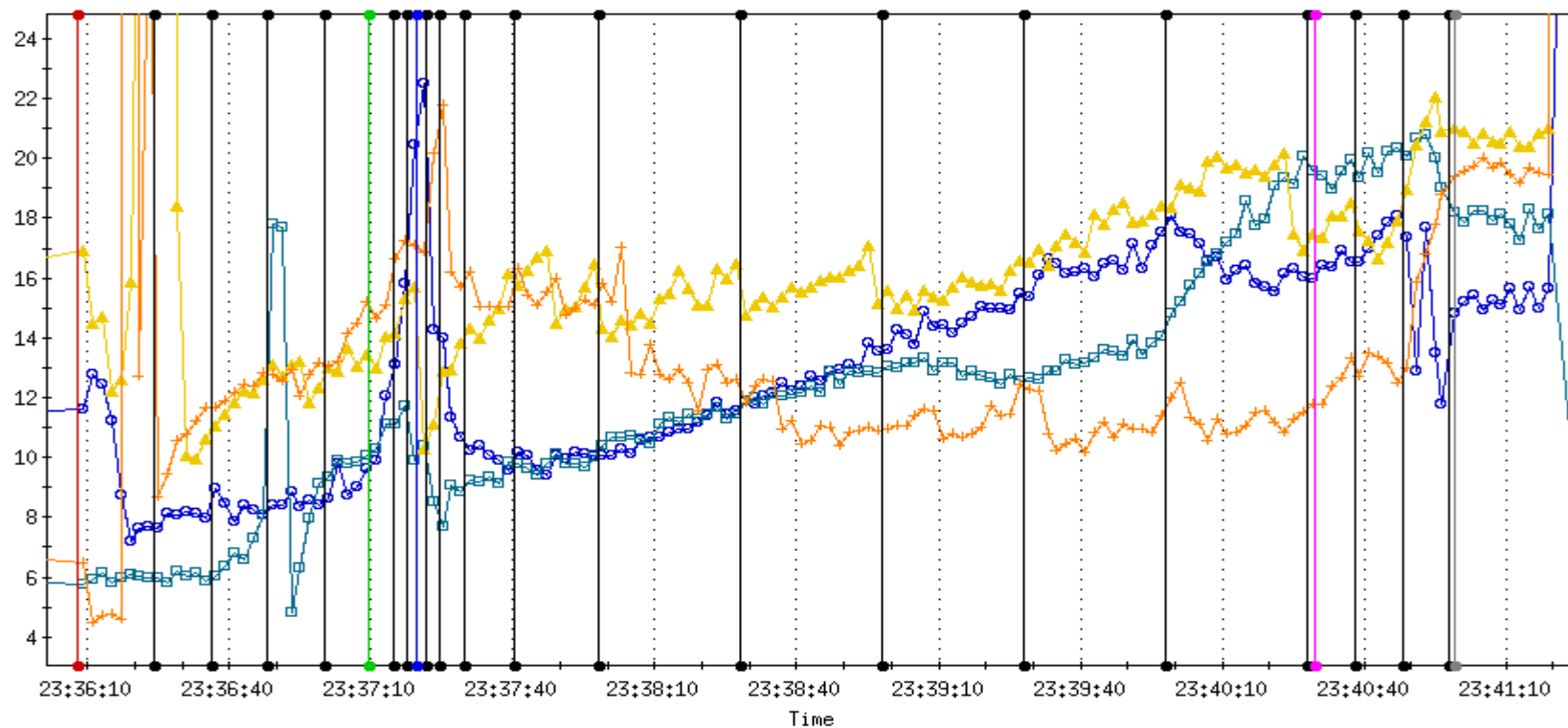




# Emittance on the ramp

Tue Jan 25 23:06:46 - Tue Jan 25 23:41:25

Window Event



- |  |   |
|--|---|
| —○— RhicIpmManager.blue_horiz;normEmitM[.]5979;4   | —□— RhicIpmManager.blue_vert;normEmitM[.]5979;5   |
| —▲— RhicIpmManager.yellow_horiz;normEmitM[.]5979;6 | —+— RhicIpmManager.yellow_vert;normEmitM[.]5979;7 |
| —●— ev-accramp                                     | —●— ev-stone                                      |
| —●— ev-ygtstart                                    | —●— ev-bgtstart                                   |
| —●— ev-ygammat                                     | —●— ev-bgammat                                    |
| —●— ev-flatop                                      | —●— ev-endramp                                    |



## Work on store luminosity

- ✓ Priority: getting rid of transition instability
- Optimize collimation set-up → automatic collimation
- Automatic LISA steering – 4 experiments

Re-bucketing, common cavities  
IR corrections (yellow)

- Increase bunch intensity to  $5.5-6e9$
- Increase progressively number of bunches
- Commission ramp for new working point